Windcastle Venture Consulting
Website: www.windcastlevc.com
Email: info@windcastlevc.com

Headquarters
423 E. Town Street
Columbus, OH 43215
Tel. 312 953 6002
Tel. 614 947 3607
Fax 614 228 5889

Breaking the Cloud
Software as a Service: Pricing, Components and Benefits

The first benefit of cloud computing models that anyone thought much about was a financial one: instead of buying pieces of software, one could simply rent the software at whatever time and in whatever quantity one needed. This would effectively convert a fixed cost into a variable one, presumably saving the buyer money, or at least spreading the cash flows out over a longer period. As it turns out, this is one of the least interesting ways of looking at the cloud computing concept.

For vendors, the temptation is to simply forgo upfront revenues in favor of a recurring revenue stream. The problem is that these revenues may never adequately pay back the value of the foregone licensing fees. If, on the other hand, the rental price remains sufficiently high, then the customer faces a high, continuous cash outflow, diminished returns on investment in future periods and a stronger temptation to switch to a competitor. As a result, while Software as a Service rental models may be useful from the CFO's perspective, in that they allow the software to fit into the operational budget, the model as a whole does not do the best job of fitting costs to benefits.

Attraction to the pricing model has distracted attention from the true value of the cloud for business—the demonstrable additional benefits provided by cloud architecture in three components: support, delivery and collaboration.

The first component, cloud support, is currently in use by every major piece of software on your computer at the moment. This level takes advantage of the efficiency of distributing updates and fixes from a central server. Updates, upgrades and even the original installation can be pushed out to all active users on a system rapidly and nearly continuously (as Java users have discovered). Paul Graham pointed out the benefits of the centralized server's control over versions and updates[1] —problems can be solved as they arise, rather than being fixed as part of a large annual version change. In addition, status monitoring can be implemented as part of this technology, identifying problems in real time and again facilitating rapid improvements.

The second component, cloud delivery, allows a wide variety of applications to work through a browser or other light

---

1   Graham, Paul (2001) "The Other Road Ahead." http://www.paulgraham.com/road.html Accessed 12/28/10

client. This has a couple of key benefits: first, it reduces the dependence on specific hardware. The user is able to move around to any location, log in, and access the application with less concern about specific hardware configurations, as most of the work is being done offsite. A simpler version, the local cloud or private cloud, allows for user movement only within their own private network.

Full cloud delivery has the advantage of minimizing the requirements for technical expertise and infrastructure at the local site. This can be a substantial benefit, in particular for enterprise-level business applications. Rather than having to deal with an on-site data center, with all the attendant headcount and hardware, it's possible to outsource that portion of the requirements either to the application provider or a third party hosting service.

The third component is collaboration. This layer is familiar to anyone who has used Twitter or commented on a blog post. Contributors can look at and work on the same project at the same time, regardless of their own physical location. It's this aspect of cloud computing that is beginning to show up in business applications, starting with simple collaborative environments like 37signals' Basecamp, and working up to projects for engineering or business process applications that work better when all project participants can contribute and collaborate in real-time, rather than emailing partial files around, or having to retroactively merge versions of the same file. The technical and user experience-related requirements for this to happen smoothly are substantial, so the launch of cloud collaborative solutions for business lags consumer-directed applications at present, but the potential value of collaborative tools is vastly higher in the business and government markets, and represents the strongest opportunity going forward.

Each component provides specific, measurable benefits over software that simply sits on a local desktop. The magnitude and importance of each will vary by the specific application in question and the specific business and technological landscape in which it is situated.

It's important to note at this point that it is possible to further select what parts of the application experience that are to be cloud delivered—the application itself, the underlying user data or files, and/or the hosting component. I'm personally fond of keeping all of my data on local hard drives (with remote backup), for example; I recommend the same thing for company databases and key files. Even though I'm fairly well connected, I still find many occasions when I want to

access and manipulate files when I'm not online, so doing everything on the cloud all the time isn't a good option for me. I'm a firm believer in having the option, but not the requirement, to access data through the cloud. It's this array of choices that is most closely associated with the "as a Service" tag[2] . Software vendors may therefore choose to provide support, delivery and collaboration at the software level themselves, while relying on Rackspace or Amazon to provide hosting services at a larger scale and lower costs than the software provider could alone.

As a vendor, this means that you will be able to offer a cloud-based solution with additional value over and above your on-premises offerings. As a consumer, this means that you should be able to access software that does what you want, when you want, while maintaining adequate risk management and control. The best next generation software will offer a spectrum of options for local and remote use that can be tailored for the needs of the specific customer. [3]

---

2   e.g. Software as a Service (SaaS), Infrastructure as a Service (IaaS), Data as a Service (DaaS), etc.
For an interesting view of this set of options as a stack of layers similar to the TCP/IP protocol stack, see Suster, Mark. "Data is the Next Major Layer of the Cloud & A Major Victory for Start-ups".
http://www.bothsidesofthetable.com/2010/12/09/data-is-the-next-major-layer-of-the-cloud-a-major-victory-for-startups/ Accessed 12/28/10.

3 The cloud component benefits which match up with specific customer and vendor needs include:
- Support friendly
- Faster fixes
- Software anywhere
- Platform agnostic
- Light/No footprint
- Working together
- Version management
- Better backups

See also our white paper:
"Cloud Computing Benefits Reconsidered."